TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

ENVIRONMENTAL CHECKLIST

Purpose of this Checklist:

The State Environmental Policy Act (SEPA) Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Use of this Checklist:

1. The City will normally make the decision whether an EIS is required within 15 working days of the date a completed application and checklist are submitted for your proposal.
2. Once the completed checklist is submitted, the City may ask you to explain your answers or to provide additional information reasonably related to determining if there may be significant impacts. The City will then normally make the decision whether an EIS is required within 15 working days of receiving the requested information.
3. The City will take no action on your proposal until after the decision is made that an EIS is not required or until after a required final EIS is issued. This means that any hearing on your proposal will not be scheduled until these decisions have been made.

Instructions for Applicants:

1. This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determination whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.
2. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "does not apply." ***Complete answers to the questions now may avoid unnecessary delays later.***
3. Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.
4. **The checklist questions apply to all parts of your proposal** even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effect.

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A. BACKGROUND

1. Name of proposed project, if applicable: **Anti-Aircraft Creek Culvert Replacement**

2. Name of applicant: **City of Issaquah, Public Works Engineering Department**

3. Address and phone number of applicant and contact person:

   Applicant/Contact: **Kerry Ritland**
   City of Issaquah, Public Works Engineering Department
   PO Box 1307
   Issaquah, Washington 98027
   (425) 837-3410

4. Date checklist prepared: **November 2015**

5. Agency requesting checklist: **City of Issaquah**

6. Proposed timing or schedule (including phasing, if applicable):

   Construction of the proposed project is estimated to take up to six weeks. In-water work is proposed to occur during the fish window between July 15 and September 15, 2016, or as further restricted by the Washington Department of Fish and Wildlife (WDFW) in the Hydraulic Project Approval for this project.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   No additional stream-related plans are contemplated at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

   There are two reports prepared for this stretch of Anti-Aircraft Creek and the downstream wetland system.
   1. ***Wetland and Stream Determination for Issaquah Farms Property, (Parcel #042308-9029)*** **by Gary Schulz**
   2. ***Wetland and Stream Review for Issaquah Farms Property*** **by ESA**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

   A site development permit submitted to the City of Issaquah for a townhome residential project on parcel #2024069115, which the culvert extends into. An easement is being obtained from that property owner. The two projects (the culvert replacement and the Reva townhome development) are independent of each other and one doesn't require the other.

10. List any government approvals or permits that will be needed for your proposal, if known.

The following permits will have to be obtained for the proposed project:

- **City of Issaquah – Site Work, Administrative Site Development, and SEPA Review**
- **Washington State Department of Fish & Wildlife - Hydraulic Project Approval**
- **US Army Corps of Engineers – Section 404 Permit**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

An existing culvert on Anti-Aircraft Creek at the intersection of Newport Way NW and NW Oakcrest Drive is vulnerable to sedimentation and has low capacity resulting in occasional flooding of Newport Way NW. This project would alleviate the sedimentation and flooding on Newport Way NW by realigning a portion of Anti-Aircraft Creek to its natural drainage pattern and replacing existing undersized culverts with a larger box culvert. These actions will increase flow capacity and improving the channel grading to allow for transport of naturally occurring sediment in this stream system. In total, 144 feet of existing CMP culverts will be replaced with 138 feet of new box culvert. The new culvert will be located approximately 200 feet south of NW Oakcrest Drive.

Anti-Aircraft Creek is a tributary of Tibbetts Creek, which drains to the south end of Lake Sammamish. It is seasonally dry, except during wet, winter months as most of its water comes from stormwater drainage. After crossing Newport Way, Anti-Aircraft Creek enters a large wetland on parcel 2024069115 prior to the confluence with Tibbetts Creek. No portion of the culvert work will occur in this wetland (Figure 3 – Proposed Conditions). This wetland creates a fish passage barrier between Tibbetts Creek and Anti-Aircraft Creek.

Anti-Aircraft Creek originates on upper Cougar Mountain. When it reaches Newport Way the creek goes through a first culvert (driveway to the adjacent storm pond), takes a 90 degree jog to the left and flows westward along a flat drainage ditch along Newport Way NW, flows through a culvert under NW Oakcrest Drive, flows through parallel culverts under Newport Way NW, and then empties into an open channel that outlets into the wetland (Figure 2 – Existing Conditions). This flat section of creek acts as a sediment trap, making it prone to clogging during extreme rainfall events which results in flooding of the roadway. The project modifies the stream channel immediately above Newport Way (within a city-owned drainage tract parcel) to align it with the proposed box culvert underneath Newport Way NW. This straightens the stream to create the hydraulics needed to move natural stream sediment through the culvert system. On the east side of Newport Way the culvert will continue into parcel 2024069115. The owner of that property is requiring the City to obtain a 20-foot wide easement through his property and design the culvert in a way that minimizes impacts to his development plans. A 22-foot

long energy dissipater will be constructed at the outlet of the box culvert on the east side of Newport Way NW. The energy dissipater will consist of a concrete floor with boulder baffles to dissipate energy over a short distance and minimize downstream erosion.

Although this section of Anti-Aircraft Creek is considered a non-fish bearing stream and the primary purpose of the project is to alleviate a flooding hazard, a supplemental goal is to include fish passable elements in accordance with WDFW where feasible. Because of the utility constraints, we are not able to provide the design velocities and depth for fish passage through the culvert. Utility constraints include a 24" fiber optic duct, a 24" regional water pipeline, and a 6" natural gas pipeline. Relocating these utilities is infeasible. These constraints force the proposed culvert to be sized to fit within the 40 inches of allowable space below the road surface. As a result, the proposed culvert cannot have any required stream bedding due to the vertical limitations and the potential for debris to clog the culvert.

Existing culverts will be abandoned, including the culvert adjacent to the storm pond, the culvert under NW Oakcrest Drive and one of culverts under Newport Way NW will be abandoned in place (the second culvert under Newport Way NW will remain in use for other roadway drainage coming from the west). See Figure 3 –Proposed Conditions and Figure 4 - Profile. The abandoned channel will be functionally replaced with new and enhanced channels. On the west side of Newport Way NW, prior to the inlet to the proposed box culvert, the Anti-Aircraft Creek channel will be enhanced with plants. Downstream of the energy dissipater, the new channel will be enhanced with clean streambed gravels and buffer replanted. The channel modification is within the wetland buffer.

Proposed landscaping will include wetland and buffer plants that are native to the area and specific to the conditions of this setting including those well suited for the surrounding soils, hydrologic nature of the area and to the amount of sunlight or shade.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

    The proposed project is located in and along Anti-Aircraft Creek, located just east of the intersection of NW Newport Way and Oakcrest Drive NW.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other …...

The immediate project area is gently sloping with an average grade of about 10% along the culvert reach.

b. What is the steepest slope on the site (approximate percent slope)?

There are localized areas where slopes of up to 20% are found, created by fill for Newport Way.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Observed soils are generally medium to coarse-grained alluvium.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Purpose: Excavation would occur to construct the culvert under the road and create the relocated stream channel.

Type: Soil removed includes compacted roadway fill and native soils.

Amount: Approximately 800 CY

Source: All fill materials would be obtained from local suppliers.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No erosion is expected during dry season construction. Following construction the stream will naturally transport stream sediment.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

No new impervious surfaces will be created. Existing roads disturbed by trench cutting will be resurfaced.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Standard best management practices (BMPs) will be used before and during construction to minimize erosion and sedimentation. BMPs include, but are not limited to, dewatering of channel and diversion of stream water around the construction site using pumps and hoses (not anticipated to be needed because the stream is typically dry during the summer), use of silt fences, compliance with a timing restriction to coincide with the summer low-rain and low-flow period, and storage of materials away from the stream. Following grading, disturbed soils will be mulched and sown with grass seed.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Any air quality impacts from construction vehicle emissions and dust generation would be temporary and rapidly dissipated. After project completion, no further impacts to air would occur.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions that will affect the project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Standard methods of reducing impacts to air would be utilized, and include keeping all heavy equipment in good operating condition. To reduce dust generation, exposed soils and soils stockpiles would be covered or watered during grading or during dry periods when they are subjected to equipment traffic.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. This project will occur in and adjacent to Anti-Aircraft Creek, which enters Tibbetts Creek about 0.8 mile upstream of Lake Sammamish. Anti-Aircraft Creek has seasonal flow, and drains the

slopes of Cougar Mountain. Jurisdictional wetlands are present in the immediate project vicinity, but are not impacted by the project.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes, the entire project will occur in and adjacent to Anti-Aircraft Creek.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

782 CY of fill and 65 CY of excavation will occur with the construction of the channel. Approximately 0.5 acre would be affected by project activity. No wetland fill will occur.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No withdrawals or diversions will be required. Construction will occur when stream is dry in late Summer.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground

1) Will ground water be withdrawn, or will water be discharged to ground water? Give a general description, purpose, and approximate quantities if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

There will be no waste material from septic tanks or other sources discharged into the ground associated with this project.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

No new impervious surfaces will be created. Management of storm water runoff from existing impervious surfaces (which may be disturbed and then restored during the project) will not change.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Waste materials would only enter surface waters in the event of a spill or other accident. Measures would be taken to prevent such spills and accidents.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Temporary erosion and sedimentation control measures will be taken during construction to limit siltation impacts downstream. Precautions to prevent leaks or spills from equipment will also be taken.

4. Plants

a. Check or circle types of vegetation found on the site:

X deciduous tree: **alder**, maple, aspen, **other: willow, black cottonwood**
X evergreen tree: fir, **cedar**, pine, **other: Douglas-fir, spruce**
X shrubs (**Himalayan blackberry, salmonberry, red-osier dogwood, willows**)
___ pasture
___ crop or grain
___ wet soil plants: cattail, buttercup, bulrush, skunk cabbage,
___ water plants: water lily, eelgrass, milfoil, other
___ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

The majority of the vegetation removed by the project will be non-native, invasive reed canarygrass and Himalayan blackberry. In a few areas, willows, young alder and cottonwood, salmonberry and dogwood may also be disturbed. Disturbance of larger, significant trees will be avoided to the extent possible.

c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to occur on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Disturbed areas will be replanted with a diverse mix of native species, including: bigleaf maple, western red cedar, Douglas-fir, black cottonwood, willows, and a variety of shrubs.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: **hawk**, **heron**, **eagle**, **songbirds**, other:
mammals: **deer**, bear, elk, **beaver**, other:
fish: bass, **salmon**, **trout**, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

It is possible that bald eagles (*Haliaeetus leucocephalus*) could be present near the site when foraging in Tibbetts Creek or Lake Sammamish. The nearest known bald eagle nest is over 1 mile away. Bald eagles are listed as threatened under the Endangered Species Act, but are proposed for delisting.

Chinook salmon and bull trout are both listed as Threatened and coho salmon are listed as Candidate under the federal Endangered Species Act. While present in the Issaquah Creek/Lake Sammamish watershed, none are present in Anti-Aircraft Creek.

c. Is the site part of a migration route? If so, explain.

No.

d. Proposed measures to preserve or enhance wildlife, if any:

The replacement culverts, while primarily intended to alleviate conveyance problems, will have elements of fish passage design. Post-project restoration includes placement of large woody debris and planting of native trees and shrubs. These actions will benefit fish and wildlife by increasing habitat complexity and diversity.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

N/A

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

N/A

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

N/A

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

The only possibility of spill or other hazard would be associated with operation and fueling of heavy equipment used to construct the project.

1) Describe special emergency services that might be required.

Emergency services are not anticipated at the site. In the unlikely event that an accident (spill, fire, other exposure) occurs involving toxic chemicals or hazardous wastes, the local fire department and emergency medial services would respond. Any non-hazardous accidents may also require medical services. The full range of safety and accident response supplies will be on-site to treat any emergency.

2) Proposed measures to reduce or control environmental health hazards, if any:

Standard precautions would be taken. Heavy equipment would be re-fueled away from the creek where there would be no danger of fuel directly entering the stream. Use of standard best management practices for control of potential erosion would also limit the potential for pollutants to enter the stream. The construction manager would be contacted by a crew member immediately upon discovery of a spill. The construction manager would then ensure that the spill is cleaned up in the manner dictated by the chemical use instructions and would contact the appropriate authorities.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There is no noise in the area that would affect this project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The only noise generated by this project would be short-term noise from operation of heavy equipment during construction. Noise levels are unknown. Hours of operation will likely be limited to standard City of Issaquah working hours (7am-7pm), Monday through Friday and 9am to 6pm Saturday with a weekend work permit.

3) Proposed measures to reduce or control noise impacts, if any:

As mentioned above, noise generation would likely be limited to standard construction hours.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The immediate project area is a residential neighborhood to the west and undeveloped deciduous forest to the east.

b. Has the site been used for agriculture? If so, describe.

Unknown. No agricultural activities exist currently.

c. Describe any structures on the site.

None

d. Will any structures be demolished? If so, what?

None

e. What is the current zoning classification of the site?

Right of way, stormwater utility tract, and Multi-family High density

f. What is the current comprehensive plan designation of the site?

Professional Office and Single Family Small Lot.

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Anti-Aircraft Creek is an environmentally sensitive area (Class 2 stream).

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

No measures are necessary.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project is not inconsistent with any reviewed local, state or federal regulations, plans or policies.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

N/A

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

N/A

c. Proposed measures to reduce or control housing impacts, if any:

No measures are necessary.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

N/A

b. What views in the immediate vicinity would be altered or obstructed?

N/A

c. Proposed measures to reduce or control aesthetic impacts, if any:

N/A

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

N/A

b. Could light or glare from the finished project be a safety hazard or interfere with views?

N/A.

c. What existing off-site sources of light or glare may affect your proposal?

N/A

d. Proposed measures to reduce or control light and glare impacts, if any:

N/A.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

N/A.

b. Would the proposed project displace any existing recreational uses? If so, describe.

N/A.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

N/A.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None are known. A cultural resources investigation conducted for this project found no evidence of archaeological or historic sites in the project location. No further cultural resources investigations are recommended

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None known in the immediate project area.

c. Proposed measures to reduce or control impacts, if any:

No measures are necessary.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

N/A

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

N/A

c. How many parking spaces would the completed project have? How many would the project eliminate?

N/A

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

N/A

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

N/A

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

N/A

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g. Proposed measures to reduce or control transportation impacts, if any:

N/A

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

No measures are necessary.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

N/A

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

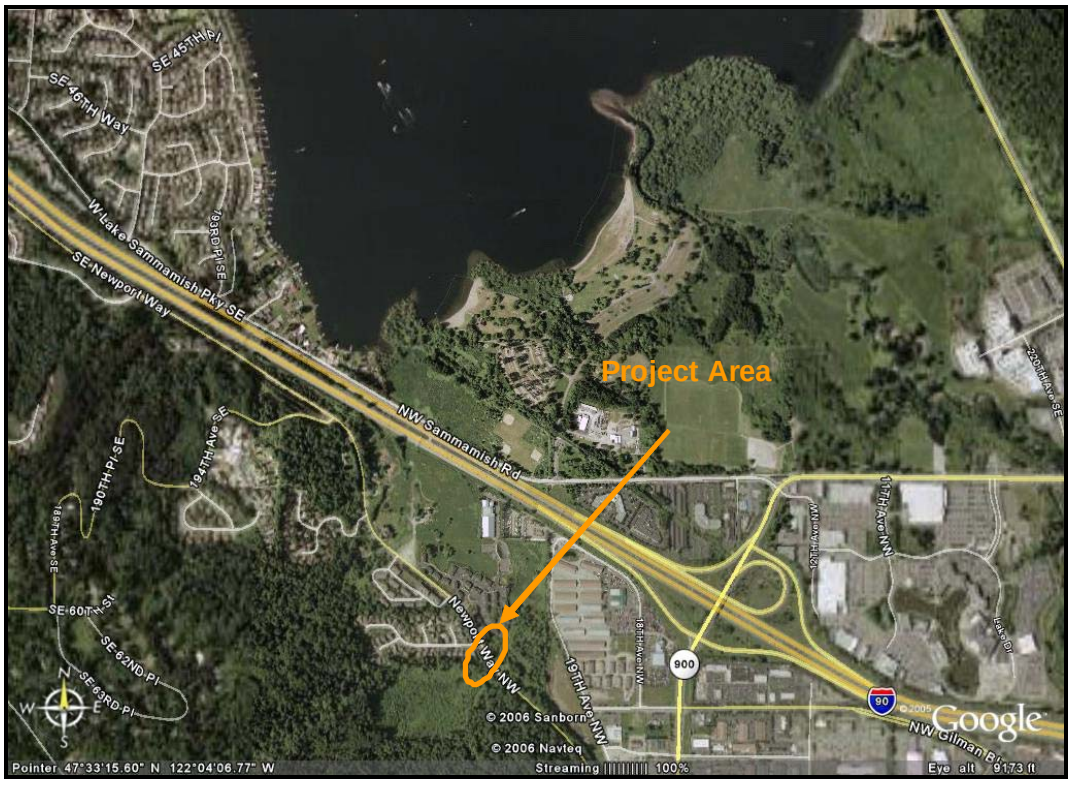
C. SIGNATURE

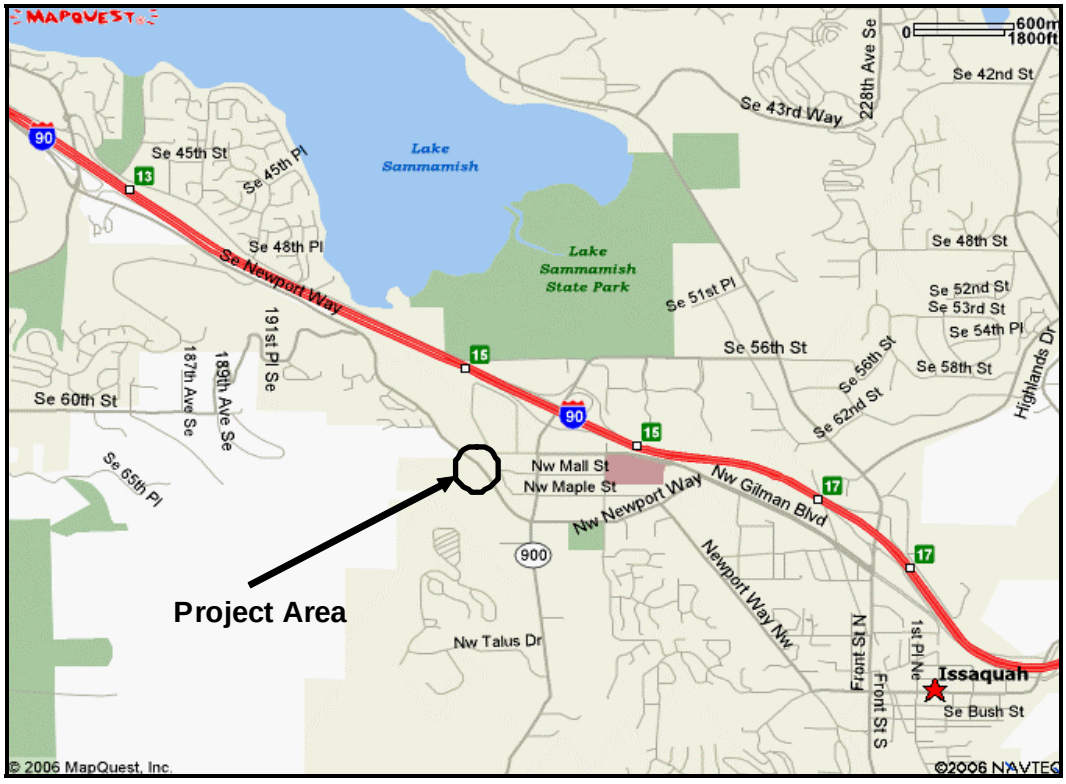
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature(s): _____

Date Submitted: 11/3/15

Vicinity Map





Maps of the project area [from Google Earth (top) and MapQuest (bottom)].